

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference PF-0627 PCT	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 99/ 25458	International filing date (day/month/year) 28/10/1999	(Earliest) Priority Date (day/month/year) 28/10/1998
Applicant INCYTE PHARMACEUTICALS, INC. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

contained in the international application in written form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. **Certain claims were found unsearchable** (See Box I).

3. **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

the text is approved as submitted by the applicant.

the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.

the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

as suggested by the applicant.

because the applicant failed to suggest a figure.

because this figure better characterizes the invention.

1

None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 99/25458

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claim 19 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. Claims Nos.: 17, 18, 20 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1 - 20 (partially)

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 17,18,20

Claims 17 and 18 concern an agonist and an antagonist of GFRP-1, respectively. Claim 20 concerns a method which makes use of the antagonist of GFRP-1. The agonist or the antagonist of GFRP-1. The agonist and antagonist are only defined by the method which can be used in order to identify these compounds. Since it is completely unclear which kind of substances will be identified by the respective method and since in the specification no concrete examples for these kind of substances are given, the scope of said claims is totally ambiguous and undefined. Moreover, it cannot be excluded that even substances known in the art may be recognized as agonists or antagonists of GFRP-1.

In view of the wording of the claims presently on file, which render it difficult, if not impossible, to determine the matter for which protection is sought, the present International application fails to comply with the clarity requirements of Article 6 PCT to such an extent that a meaningful search of the claims is impossible. Consequently, the search has been carried out for those parts of the application which do appear to be clear, namely claims 1-16 and 19 (all partially).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

1. Claims: 1-20 (partially)

Claims 1-20 (partially) refer to a purified human growth factor related molecule (GFRP-1) comprising the amino acid sequence as shown in SEQ ID N0:1 and the polynucleotide encoding said GFRP-1. GFRP-1 is 125 amino acids in length and has chemical and structural similarity with ANUP and with mouse ARS component B precursor. Furthermore, the claims concern expression vectors, host cells, antibodies, agonists, antagonists, and methods for diagnosing, treating or preventing disorders associated with expression of GFRP-1.

2. Claims: 1-20 (partially)

Claims 1-20 (partially) refer to a purified human growth factor related molecule (GFRP-2) comprising the amino acid sequence as shown in SEQ ID N0:2 and the polynucleotide encoding said GFRP-2. GFRP-2 is 127 amino acids in length and has chemical and structural similarity with hTECK, with human Dvic-1 C-C chemokine, and with mouse CC chemokine ALP. Furthermore, the claims concern expression vectors, host cells, antibodies, agonists, antagonists, and methods for diagnosing, treating or preventing disorders associated with expression of GFRP-2.

3. Claims: 1-20 (partially)

Claims 1-20 (partially) refer to a purified human growth factor related molecule (GFRP-3) comprising the amino acid sequence as shown in SEQ ID N0:3 and the polynucleotide encoding said GFRP-3. GFRP-3 is 147 amino acids in length and has chemical and structural similarity with chicken follistatin and with human follistatin-related protein FLRG. Furthermore, the claims concern expression vectors, host cells, antibodies, agonists, antagonists, and methods for diagnosing, treating or preventing disorders associated with expression of GFRP-3.

4. Claims: 1-20 (partially)

Claims 1-20 (partially) refer to a purified human growth factor related molecule (GFRP-4) comprising the amino acid sequence as shown in SEQ ID N0:4 and the polynucleotide encoding said GFRP-4. GFRP-4 is 345 amino acids in length and has chemical and structural similarity with human BMP-1 and with chicken BMP-1. Furthermore, the claims concern expression vectors, host cells, antibodies, agonists, antagonists, and methods for diagnosing, treating or preventing disorders associated with expression of GFRP-4.